

DRAFT

# Extron® Electronics

INTERFACING, SWITCHING AND DISTRIBUTION



## User's Manual

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## *SI 26 and SI 28* Surface Mount Speakers

68-1164-01  
**Rev. Axi**  
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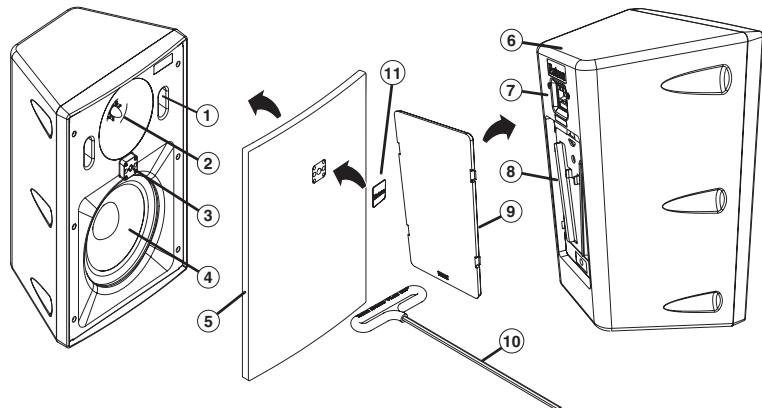


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**Figure 1 — Speaker Features**

Dimensions: SI 26: 13.0" H x 8.5" W x 6.75" D  
(33.0 cm H x 21.6 cm W x 17.1 cm D)  
SI 28: 16.5" H x 11.5" W x 8.6" D  
(41.9 cm H x 29.2 cm W x 21.9 cm D)

- ① Dual tuned bass reflex ports
- ② 1" ferrofluid-cooled, aluminum dome tweeter
- ③ Front locking access (allows for speaker position adjustment)
- ④ 6.5" (SI 26) or 8" (SI 28) long-throw woofer
- ⑤ Grill and enclosure may be painted to match environment
- ⑥ Weather resistant construction
- ⑦ Push down spring terminals
- ⑧ Wall mount assembly with unique V-Lock™ (Patent Pending) system included
- ⑨ Back cover for use when speakers are not wall mounted
- ⑩ Allen hex tool
- ⑪ Extron logo (fits in grill to cover locking port access)
- ⑫ 8 ohm nominal impedance
- ⑬ 75 watts (SI 26) or 90 watts (SI 28) continuous pink noise
- ⑭ 150 watts (SI 26) or 180 watts (SI 28) continuous program
- ⑮ Internal driver overload protection circuit

**NOTE** For items 12 through 15, see "Specifications", page 7 of this manual.

## About the SI 26 and SI 28 Speakers

The Extron System INTEGRATOR™ SI 26 and SI 28 two-way surface mount speakers are ideally suited for classrooms, conference rooms, and boardrooms. With a weather resistant construction, they are also suitable for outdoor environments.

- SI 26 features a 6.5" long-throw woofer, 1" tweeter, 150 watts continuous program capacity, and frequency response from 70 Hz to 20 kHz.
- SI 28 features an 8" long-throw woofer, 1" tweeter, 180 watts continuous program capacity, and frequency response from 50 Hz to 20 kHz.

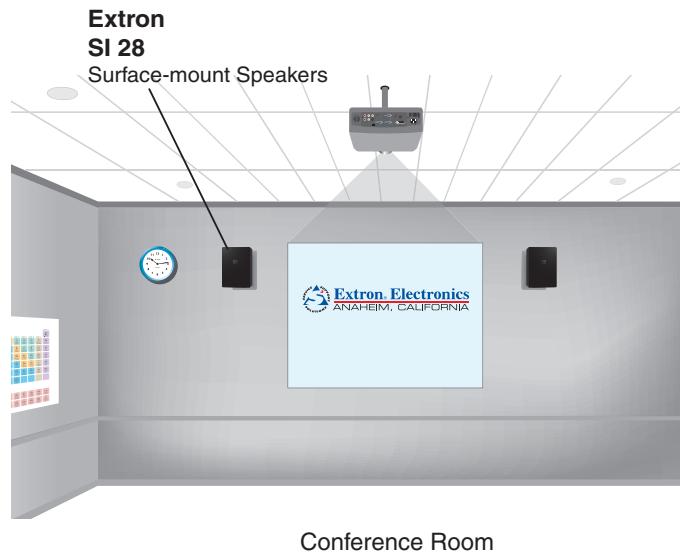
**Figure 1 — Extron SI surface speakers**

**NOTE** Extron recommends that the wiring installation is performed by a professional audio equipment installer.

**CAUTION** Use cable clamps to hold the cables in place for strain relief. Trim back/insulate exposed cable shields with heat shrink to reduce the chance of short circuits

## Installing the SI 26 or SI 28 Speaker

The SI 26 or SI 28 can be mounted on a surface, such as a wall or post, or mounted in a bookcase, or under a shelf, and can be used with any Extron product with power amps.



**Figure 2 — Surface speaker application**

## Desk top or bookshelf applications

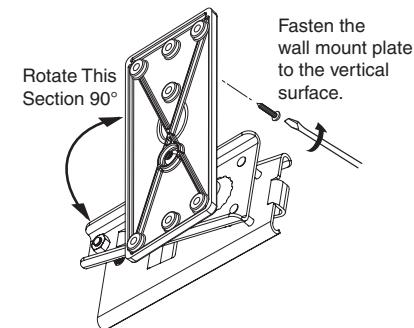
1. For quick installation on a desk top or bookshelf, simply place on a desk, shelf or other flat surfaces as desired.

**NOTE** *Do not detach the back cover.*

2. Route the speaker wire (Extron recommends using 12-18 AWG) to the speakers.
3. Strip the wire and connect the speakers as described on page 6.

## Wall mounting

1. If mounting to drywall, use a stud locator to locate the studs in the wall. Mark their position.
2. Remove the wall mount assembly from the box and loosen the hex cap screw (by turning it counter clockwise) with the allen hex tool supplied. Rotate the front section approximately 90 degrees to the rear mounting plate (see figure 3) and tighten the hex cap screw, locking the plate in position. This will make the next steps easier to perform.

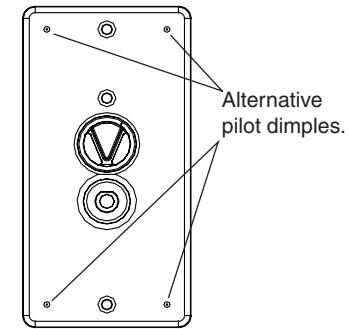


**Figure 3 — Rotating and mounting the wall mount assembly**

3. Mark the location of the wall mount plates three center holes on the stud line and drill the pilot holes.

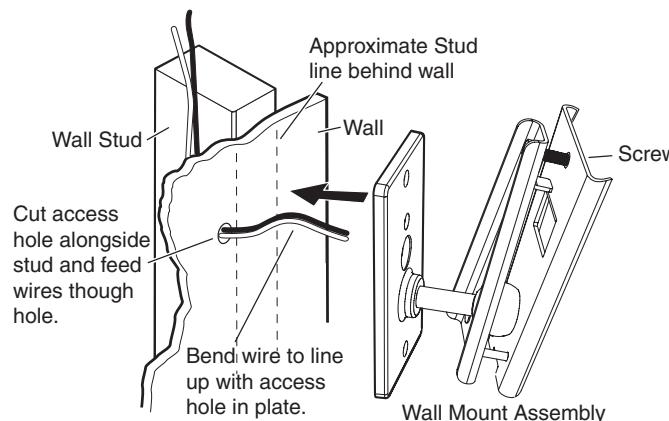
**NOTE**

*For some surfaces the four alternative pilot dimples (see figure 4) may be used to secure the assembly in place. Mark and drill as appropriate*



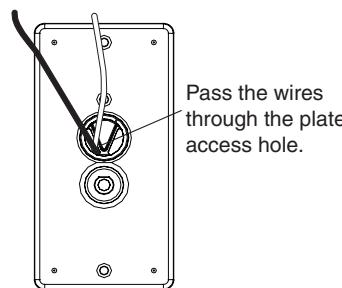
**Figure 4 — Alternative pilot dimples on the speaker bracket**

4. Mark the wall where the wire will pass through the plate, and cut a small access hole large enough for the wire to pass through without snagging. If the stud is wider than the plates access hole, then cut the hole in the wall to the left or right and directly alongside the stud (see figure 5). Before cutting it, make sure the plate will cover the hole when it is finally installed.



**Figure 5 — Install wall mount assembly**

- NOTE** Extron recommends that the wiring installation is performed by a professional audio equipment installer.
5. Using compatible speaker wire (Extron recommends using 12-18 AWG), route the wire from the audio source to the SI speaker location by the most convenient and safe route. If the wiring is to remain hidden behind the wall, follow the stud to where the small access hole has been cut, and feed about two feet of wire out through the hole into the room. If necessary, bend the wire to align with the plate (see figure 5). Secure the wire at various places to the stud, but allow enough freedom of movement near to the hole for connection to the speaker
  6. Pull sufficient wire up through the holes in the rear plate (see figure 6) to allow ease of connection to the speaker after installation.

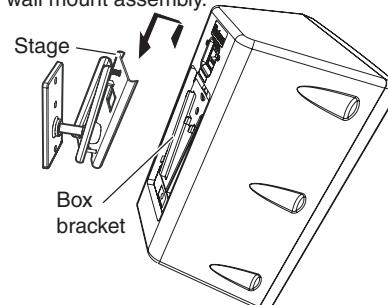


**Figure 6 — Pass the wire through the plate**

7. Place the wall mount assembly against the wall, aligning the plate holes with those drilled, and secure with appropriate hardware.

8. When the assembly is securely in place, loosen the hex cap screw (turn counter-clockwise) and rotate the front section back into a vertical position with the hex cap screw at the top. Using the allen hex tool, turn the hex cap screw clockwise to tighten.
9. Remove the cover from the back of a speaker and carefully slide the speaker box bracket down into the V lock groove until it locks into place (see figure 7).

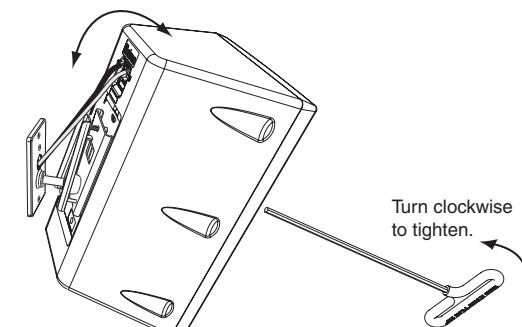
Slide the speaker onto the wall mount assembly.



**Figure 7 — Install speaker onto the wall mount assembly**

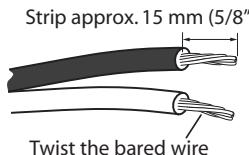
10. To adjust the angle of the speaker, carefully remove the Extron logo on the front of the speaker to expose the front locking access (see Figure 1, Item 3, for location). Insert the allen hex tool into the locking access, and slightly loosen the hex cap screw. Adjust the speaker to the desired angle (see figure 8), and torque the cap screw down clockwise until snug. The speaker will sit securely in the desired position. Install the Extron logo.

**NOTE** The Extron logo can be fitted either horizontally or vertically.



**Figure 8 — Adjust speaker and lock in place**  
SI 26 and SI 28 Speakers • Installation

11. Repeat steps 1-10 for the second speaker.
12. When both speakers are in place, carefully pull enough wire to reach up to the terminals at the back of the speaker and strip the ends of the wire approximately 5/8" (15 mm), for connection. Twist the bared ends of each separate wire so that they will hold firmly in the connector.

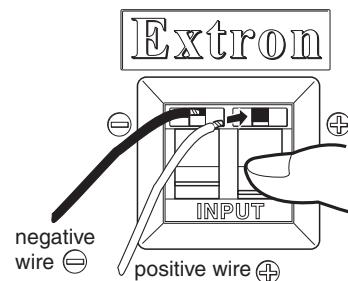


**Figure 9 — Strip the wire and twist the bared ends**

13. Press down on the spring loaded terminals to open the holes at the top. Observing the correct polarity, (+) wire to (+) terminal and (-) wire to (-) terminal) insert the twisted wires into the relevant open holes (see figure 10) and release the springs to secure. Push any loose wire through the plate on the wall mount assembly and back into the wall.

**CAUTION**

*Do not connect the speaker terminals to one channel in parallel (together) with those of the other channel.*



Push down on the spring terminals at the back of the speaker, and insert the wires. Release the springs to secure.

**Figure 10 — Insert wiring into the terminals**

14. Turn on the audio source and any associated devices. Follow the manufacturers instructions to adjust the source and device settings as desired to get the optimum audio output for your speaker application. If necessary, re-adjust the angle of the speaker (repeat step 10) to get the best audio area coverage.

## Audio/acoustic and electrical

Speaker type.....	2-way, indoor/outdoor surface mount
Frequency range.....	SI 26 70 Hz to 20 kHz, -10 dB, half space SI 28 50 Hz to 20 kHz, -10 dB, half space
Power capacity .....	SI 26 150 W continuous program 75 W continuous pink noise SI 28 180 W continuous program 90 W continuous pink noise
Nominal sensitivity.....	90 dB SPL, 1W, 1m, half space
Nominal impedance .....	8 ohms
Crossover frequency .....	SI 26 2.3 kHz SI 28 2.1 kHz
Woofer.....	SI 26 6.5" (165 mm) polypropylene cone SI 28 8.0" (203 mm) polypropylene cone
Tweeter .....	1.0" (25 mm) aluminum dome
Overload protection.....	Full range power limiter, protecting the tweeter, woofer, and crossover
Input connector .....	2 pin spring terminals

## General

Package.....	2 speakers (1 pair)
Temperature/humidity Storage:	-40 to +158 °F (-40 to +70° C) / 10% to 90%, noncondensing

Operating:	+32 to +122 °F (0 to +50° C) / 10% to 90%, noncondensing
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Mounting.....	Wall mount assembly with V-lock (patent pending)
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**NOTE**

*Wall mount assembly can be angled up to 20° upward, 35° downward, 30° to the left, and 30° to the right.*

Enclosure type .....	Plastic, trapezoidal, with metal grille and bass reflex ports
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Enclosure outer dimensions .....	SI 26: 13.0" H x 8.5" W x 6.75" D (33.0 cm H x 21.6 cm W x 17.1 cm D) SI 28: 16.5" H x 11.5" W x 8.6" D (41.9 cm H x 29.2 cm W x 21.9 cm D)
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Product weight .....	SI 26 11 lbs (5 kg) each SI 28 15 lbs (6.8 kg) each
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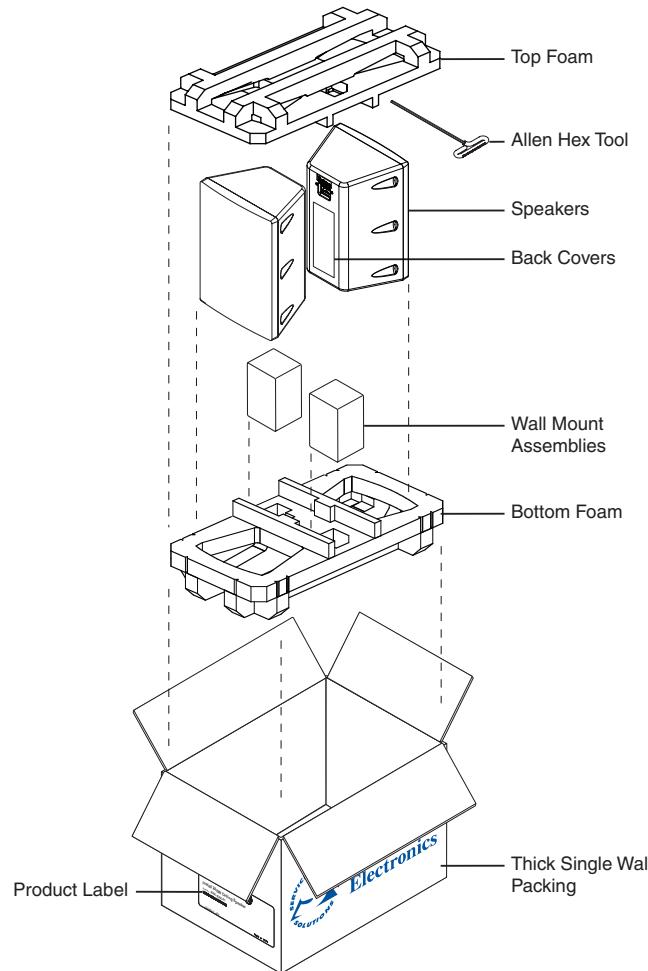
Shipping weight .....	SI 26 30 lbs (14 kg) per pair with mounting kit package SI 28 40 lbs (19 kg) per pair with mounting kit package
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Warranty ..... 5 years parts and labor

**NOTE** All nominal levels are at  $\pm 10\%$ .

**NOTE** Specifications are subject to change without notice.

### Packaging information



**Figure 9 — Packaging for SI 26 and SI 28**

### Extron's Warranty

Extron Electronics warrants this product against defects in materials and workmanship for a period of five years from the date of purchase. In the event of malfunction during the warranty period attributable directly to faulty workmanship and/or materials, Extron Electronics will, at its option, repair or replace said products or components, to whatever extent it shall deem necessary to restore said product to proper operating condition, provided that it is returned within the warranty period, with proof of purchase and description of malfunction to:

**USA, Canada, South America,  
and Central America:**

Extron Electronics  
1001 East Ball Road  
Anaheim, CA 92805, USA

**Europe, Africa, and the Middle East:**

Extron Electronics, Europe  
Beeldschermweg 6C  
3821 AH Amersfoort  
The Netherlands

**Asia:**

Extron Electronics, Asia  
135 Joo Seng Road, #04-01  
PM Industrial Bldg.  
Singapore 368363

**Japan:**

Extron Electronics, Japan  
Kyodo Building  
16 Ichibancho  
Chiyoda-ku, Tokyo 102-0082  
Japan

This Limited Warranty does not apply if the fault has been caused by misuse, improper handling care, electrical or mechanical abuse, abnormal operating conditions or non-Extron authorized modification to the product.

*If it has been determined that the product is defective, please call Extron and ask for an Applications Engineer at (714) 491-1500 (USA), 31.33.453.4040 (Europe), 65.6383.4400 (Asia), or 81.3.3511.7655 (Japan) to receive an RA# (Return Authorization number). This will begin the repair process as quickly as possible.*

Units must be returned insured, with shipping charges prepaid. If not insured, you assume the risk of loss or damage during shipment. Returned units must include the serial number and a description of the problem, as well as the name of the person to contact in case there are any questions.

Extron Electronics makes no further warranties either expressed or implied with respect to the product and its quality, performance, merchantability, or fitness for any particular use. In no event will Extron Electronics be liable for direct, indirect, or consequential damages resulting from any defect in this product even if Extron Electronics has been advised of such damage.